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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,279	01/20/2004	Shinichi Ishizuka	Q79062	6849

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EXAMINER

PIZIALI, JEFFREY J

ART UNIT	PAPER NUMBER
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2673

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/759,279

**Applicant(s)**

ISHIZUKA, SHINICHI

**Examiner**

Jeff Piziali

**Art Unit**

2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☒ Certified copies of the priority documents have been received in Application No. 09/377,405.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1/20/2004.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 09/377,405, filed on 20 August 1999.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 7-10 and 15-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. The term "almost the same voltage" in claims 7-10 and 15-18 is a relative term which renders each claim indefinite. The term "almost the same voltage" is not defined by the claims, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. One of ordinary skill in the art would find it difficult to discern precisely how close voltage values must be before the voltages would be considered "almost the same."

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-18 are rejected under 35 U.S.C. 102(a) and 35 U.S.C. 102(e) as being anticipated by Norman et al (US 5,719,589 A).

Regarding claim 1, Norman discloses a driving method of a light-emitting display [Fig. 1; 10] in which light-emitting elements are connected to intersections of positive electrode lines [Fig. 3; 14] and negative electrode lines [Fig. 3; 13] arranged in a matrix, either one of said positive electrode lines or said negative electrode lines are employed as scan lines [Fig. 3; 13] with the other employed as drive lines [Fig. 3; 14], said driving method comprising; while scanning [Fig. 3; 42] the scan lines, connecting [Fig. 3; 36] drive sources [Fig. 3; 37] to desired drive lines in synchronization with the scanning, whereby allowing the light-emitting elements connected to the intersections of the scan lines and drive lines to emit light; and during a reset period after a scan period for scanning an arbitrary scan line is complete and before scanning the following scan line is started, applying a first reset voltage [Fig. 3;  $V_R$ ] to all of said scan lines and applying a second reset voltage [Fig. 3;  $V_C$ ] that is greater than said first reset voltage to all of said drive lines (see Column 5, Line 46 - Column 8, Line 53).

Regarding claim 2, Norman discloses the difference between said second reset voltage and said first voltage is set to be lower than the light emission threshold voltage of said light-emitting element (see Column 7, Lines 3-18).

Regarding claim 3, Norman discloses said drive lines are connectable to either said drive source or a second reset voltage source [Fig. 3;  $V_C$ ] for providing said second reset voltage, said scan lines are connectable to either a first reset voltage source [Fig. 3;  $V_R$ ] for providing said first reset voltage or a reverse bias voltage source [Fig. 3; 45, 48] for providing a predetermined reverse bias potential (see Column 7, Line 3 - Column 8, Line 53).

Regarding claim 4, this claim is rejected by the reasoning applied in rejecting claim 3.

Regarding claim 5, Norman discloses said first reset voltage source provides a ground potential (see Column 7, Lines 3-34 and Column 8, Lines 1-36).

Regarding claim 6, this claim is rejected by the reasoning applied in rejecting claim 5.

Regarding claim 7, Norman discloses said reverse bias voltage sources are to have almost the same voltage as the voltage value determined by subtracting said second reset voltage from light emission specifying voltages of light-emitting elements (see Column 8, Lines 1-36).

Regarding claim 8, this claim is rejected by the reasoning applied in rejecting claim 7.

Regarding claim 9, this claim is rejected by the reasoning applied in rejecting claim 7.

Regarding claim 10, this claim is rejected by the reasoning applied in rejecting claim 7.

Regarding claim 11, Norman discloses said drive lines are connectable to either one of said drive sources, the second reset voltage source for providing said second reset voltage, or a grounding means for providing a ground potential, said scan lines are connectable to either the first reset voltage source for providing said first reset potential or the reverse bias voltage source for providing a predetermined reverse bias potential (see Column 7, Line 3 - Column 8, Line 53).

Regarding claim 12, this claim is rejected by the reasoning applied in rejecting claim 11.

Regarding claim 13, this claim is rejected by the reasoning applied in rejecting claim 5.

Regarding claim 14, this claim is rejected by the reasoning applied in rejecting claim 5.

Regarding claim 15, Norman discloses said reverse bias voltage source has almost the same voltage as the light emission specifying voltage of light-emitting elements (see Column 7, Lines 3-18).

Regarding claim 16, this claim is rejected by the reasoning applied in rejecting claim 15.

Regarding claim 17, this claim is rejected by the reasoning applied in rejecting claim 15.

Regarding claim 18, this claim is rejected by the reasoning applied in rejecting claim 15.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yamashita (US 6,903,712 B1), Ogusu et al (US 6,894,685 B2), Togashi et al (US 6,894,436 B2), Sakuragi (US 6,847,193 B2), Muruyama (US 6,803,729 B2), Van Velzen (US 6,778,154 B2), Yoshida et al (US 6,774,878 B2), Ishizuka et al (US 6,771,235 B2), Ishizuka (US 6,714,177 B1), Ishizuka et al (US 6,707,438 B1), Tsuchida et al (US 6,680,719 B2), Ishizuka et al (US 6,617,801 B2), Boer (US 6,608,448 B2), Everitt (US 6,594,606 B2), Ishizuka (US 6,587,087 B1), Ushigusa (US 6,552,703 B1), Tsuji (US 6,545,652 B1), Lai et al (US 6,501,226 B2), Yeuan (US 6,486,607 B1), Tsuchida et al (US 6,473,064 B1), Ochi et al (US 6,376,994 B1), Suzuki (US 6,369,786 B1), Iketsu et al (US 6,369,516 B1), Okuda (US 6,369,515 B1), Ishizuka et al (US 6,351,255 B1), Yoshida et al (US 6,351,076 B1), Ishizuka (US 6,339,415 B1), Yamashita et al (US 6,222,323 B1), Fujita (US 4,652,872 A), Gaur (US 3,793,628 A), and McDonald (US 3,696,393 A) are cited to further evidence the state of the art pertaining to driving methods of light-emitting displays.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Piziali whose telephone number is (571) 272-7678. The examiner can normally be reached on Monday - Friday (6:30AM - 3PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on (571) 272-7681. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



J.P.  
23 June 2005



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